**New England**
**ACCUTEST**
LABORATORIES

## Technical Report for

**GEI Consultants, Inc.**

**Canton Airport Canton MA**

**00291-7**

**Accutest Job Number:  M91216R**

**Sampling Date: 05/06/10**

**Report to:**

GEI Consultants, Inc.

Nslagowski@geiconsultants.com

ATTN: Naomi Slagowski

**Total number of pages in report:  20**

**nelac**
ACCREDITED IN ACCORDANCE WITH

Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Conference
and/or state specific certification programs as applicable.

Reza Pand
**Lab Director**

**Client Service contact: Kristen Blanchard    508-481-6200**

# Table of Contents

## -1-

# Sample Summary

**GEI Consultants, Inc.**

**Job No:**     **M91216R**

**Canton Airport Canton MA**
**Project No:**   **00291-7**

| Sample Number | Collected Date | Time By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|
| M91216-7R | 05/06/10 | 15:58 SLS | 05/07/10 | SO | Soil | 093820-DI-A-28-A |
| M91216-8R | 05/06/10 | 16:05 SLS | 05/07/10 | SO | Soil | 093820-DI-A-28-B |
| M91216-9R | 05/06/10 | 16:12 SLS | 05/07/10 | SO | Soil | 093820-DI-A-28-C |
| M91216-10R | 05/06/10 | 15:41 SLS | 05/07/10 | SO | Soil | 093820-DI-A-29-A |
| M91216-11R | 05/06/10 | 15:49 SLS | 05/07/10 | SO | Soil | 093820-DI-A-29-B |
| M91216-12R | 05/06/10 | 15:54 SLS | 05/07/10 | SO | Soil | 093820-DI-A-29-C |

**Soil samples reported on a dry weight basis unless otherwise indicated on result page.**

**ACCUTEST**
Laboratories

# SAMPLE DELIVERY GROUP CASE NARRATIVE

| | | | |
|---|---|---|---|
| **Client:** | GEI Consultants, Inc. | **Job No** | M91216R |
| **Site:** | Canton Airport Canton MA | **Report Date** | 6/7/2010 2:29:17 PM |

6 Sample(s) were collected on 05/06/2010 and were received at Accutest on 05/07/2010 properly preserved, at 2.2 Deg. C and intact. These Samples received an Accutest job number of M91216R. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

## Extractables by GC By Method SW846 8082

| | | | |
|---|---|---|---|
| **Matrix** | SO | **Batch ID:** | OP21542 |

- All samples were analyzed within the recommended method holding time.

- All method blanks for this batch meet method specific criteria.

- M91216-8R for Tetrachloro-m-xylene: Outside control limits due to possible matrix interference.

## Wet Chemistry By Method SM21 2540 B MOD.

| | | | |
|---|---|---|---|
| **Matrix** | SO | **Batch ID:** | GN32017 |

- Sample(s)  M91710-1DUP were used as the QC samples for  Solids, Percent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(M91216R).

## Sample Results

## Report of Analysis

# Report of Analysis

| | | | | |
|---|---|---|---|---|
| **Client Sample ID:** | 093820-DI-A-28-A | | | |
| **Lab Sample ID:** | M91216-7R | **Date Sampled:** | 05/06/10 | |
| **Matrix:** | SO - Soil | **Date Received:** | 05/07/10 | |
| **Method:** | SW846 8082   SW846 3540C | **Percent Solids:** | 39.1 | |
| **Project:** | Canton Airport Canton MA | | | |

| | **File ID** | **DF** | **Analyzed** | **By** | **Prep Date** | **Prep Batch** | **Analytical Batch** |
|---|---|---|---|---|---|---|---|
| **Run #1** | BB30282.D | 1 | 06/07/10 | CZ | 06/05/10 | OP21542 | GBB2049 |
| **Run #2** | | | | | | | |

| | **Initial Weight** | **Final Volume** |
|---|---|---|
| **Run #1** | 15.3 g | 10.0 ml |
| **Run #2** | | |

**PCB List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 250 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 250 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 250 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 250 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 250 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 250 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 250 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 72% | | 30-150% |
| 877-09-8 | Tetrachloro-m-xylene | 74% | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 84% | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 69% | | 30-150% |

| | |
|---|---|
| **ND** = Not detected | **J** = Indicates an estimated value |
| **RL** = Reporting Limit | **B** = Indicates analyte found in associated method blank |
| **E** = Indicates value exceeds calibration range | **N** = Indicates presumptive evidence of a compound |

# Report of Analysis

| | |
|---|---|
| **Client Sample ID:** | 093820-DI-A-28-B |
| **Lab Sample ID:** | M91216-8R |
| **Matrix:** | SO - Soil |
| **Method:** | SW846 8082   SW846 3540C |
| **Project:** | Canton Airport Canton MA |

| | |
|---|---|
| **Date Sampled:** | 05/06/10 |
| **Date Received:** | 05/07/10 |
| **Percent Solids:** | 52.3 |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| **Run #1** | BB30283.D | 1 | 06/07/10 | CZ | 06/05/10 | OP21542 | GBB2049 |
| **Run #2** | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| **Run #1** | 15.2 g | 10.0 ml |
| **Run #2** | | |

**PCB List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 190 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 190 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 190 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 190 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 190 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 190 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 190 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 12265% [a] | | 30-150% |
| 877-09-8 | Tetrachloro-m-xylene | 7801% [a] | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 88% | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 40% | | 30-150% |

**(a) Outside control limits due to possible matrix interference.**

| | |
|---|---|
| ND = Not detected | J = Indicates an estimated value |
| RL = Reporting Limit | B = Indicates analyte found in associated method blank |
| E = Indicates value exceeds calibration range | N = Indicates presumptive evidence of a compound |

# Report of Analysis

| | | | | | |
|---|---|---|---|---|---|
| Client Sample ID: | 093820-DI-A-28-C | | | | |
| Lab Sample ID: | M91216-9R | | Date Sampled: | 05/06/10 | |
| Matrix: | SO - Soil | | Date Received: | 05/07/10 | |
| Method: | SW846 8082   SW846 3540C | | Percent Solids: | 64.4 | |
| Project: | Canton Airport Canton MA | | | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | BB30284.D | 1 | 06/07/10 | CZ | 06/05/10 | OP21542 | GBB2049 |
| Run #2 | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| Run #1 | 15.2 g | 10.0 ml |
| Run #2 | | |

**PCB List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 150 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 150 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 150 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 150 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 150 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 150 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 150 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 62% | | 30-150% |
| 877-09-8 | Tetrachloro-m-xylene | 51% | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 89% | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 70% | | 30-150% |

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

# Report of Analysis

| | | |
|---|---|---|
| **Client Sample ID:** | 093820-DI-A-29-A | |
| **Lab Sample ID:** | M91216-10R | **Date Sampled:** 05/06/10 |
| **Matrix:** | SO - Soil | **Date Received:** 05/07/10 |
| **Method:** | SW846 8082   SW846 3540C | **Percent Solids:** 38.0 |
| **Project:** | Canton Airport Canton MA | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| **Run #1** | BB30285.D | 1 | 06/07/10 | CZ | 06/05/10 | OP21542 | GBB2049 |
| **Run #2** | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| **Run #1** | 15.3 g | 10.0 ml |
| **Run #2** | | |

**PCB List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 260 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 260 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 260 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 260 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 260 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 260 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 260 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 77% | | 30-150% |
| 877-09-8 | Tetrachloro-m-xylene | 56% | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 118% | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 96% | | 30-150% |

| | |
|---|---|
| **ND = Not detected** | **J = Indicates an estimated value** |
| **RL = Reporting Limit** | **B = Indicates analyte found in associated method blank** |
| **E = Indicates value exceeds calibration range** | **N = Indicates presumptive evidence of a compound** |

# Report of Analysis

| | | | | |
|---|---|---|---|---|
| **Client Sample ID:** | 093820-DI-A-29-B | | | |
| **Lab Sample ID:** | M91216-11R | **Date Sampled:** | 05/06/10 | |
| **Matrix:** | SO - Soil | **Date Received:** | 05/07/10 | |
| **Method:** | SW846 8082   SW846 3540C | **Percent Solids:** | 48.5 | |
| **Project:** | Canton Airport Canton MA | | | |

| | **File ID** | **DF** | **Analyzed** | **By** | **Prep Date** | **Prep Batch** | **Analytical Batch** |
|---|---|---|---|---|---|---|---|
| **Run #1** | BB30286.D | 1 | 06/07/10 | CZ | 06/05/10 | OP21542 | GBB2049 |
| **Run #2** | | | | | | | |

| | **Initial Weight** | **Final Volume** |
|---|---|---|
| **Run #1** | 15.4 g | 10.0 ml |
| **Run #2** | | |

**PCB List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 200 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 200 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 200 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 200 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 200 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 200 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 200 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 85% | | 30-150% |
| 877-09-8 | Tetrachloro-m-xylene | 58% | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 112% | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 98% | | 30-150% |

| | |
|---|---|
| **ND** = Not detected | **J** = Indicates an estimated value |
| **RL** = Reporting Limit | **B** = Indicates analyte found in associated method blank |
| **E** = Indicates value exceeds calibration range | **N** = Indicates presumptive evidence of a compound |

# Report of Analysis

| | | | | |
|---|---|---|---|---|
| **Client Sample ID:** | 093820-DI-A-29-C | | | |
| **Lab Sample ID:** | M91216-12R | **Date Sampled:** | 05/06/10 | |
| **Matrix:** | SO - Soil | **Date Received:** | 05/07/10 | |
| **Method:** | SW846 8082   SW846 3540C | **Percent Solids:** | 67.9 | |
| **Project:** | Canton Airport Canton MA | | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| **Run #1** | BB30287.D | 1 | 06/07/10 | CZ | 06/05/10 | OP21542 | GBB2049 |
| **Run #2** | | | | | | | |

| | Initial Weight | Final Volume |
|---|---|---|
| **Run #1** | 15.2 g | 10.0 ml |
| **Run #2** | | |

**PCB List**

| CAS No. | Compound | Result | RL | Units | Q |
|---|---|---|---|---|---|
| 12674-11-2 | Aroclor 1016 | ND | 150 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 150 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 150 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 150 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 150 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 150 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 150 | ug/kg | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 67% | | 30-150% |
| 877-09-8 | Tetrachloro-m-xylene | 47% | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 95% | | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 78% | | 30-150% |

| | |
|---|---|
| ND = Not detected | J = Indicates an estimated value |
| RL = Reporting Limit | B = Indicates analyte found in associated method blank |
| E = Indicates value exceeds calibration range | N = Indicates presumptive evidence of a compound |

ACCUTEST LABORATORIES

M91216R

**New England**
**ACCUTEST**
L A B O R A T O R I E S

**Misc. Forms**

**Custody Documents and Other Forms**

**Includes the following where applicable:**

- **Certification Exceptions**
- **Parameter Certifications (MA)**
- **Chain of Custody**
- **MCP Form**
- **Sample Tracking Chronicle**

# Chain-of-Custody Record

**Laboratory:** AccuTEST

**Laboratory Job #** (Lab use only): M91216R

**GEI Consultants**
400 Unicorn Park Drive
Woburn, MA 01801
TEL: 781-721-4098
FAX: 781-721-4073

## Project Information

**Project Name:** Canton Airport
**Project Number:** 09382-C
**Send Report to:** Ray Siegener
**Send Faxed Results to:**
**Send EDD to:** labdata @geiconsultants.com

**Project Location:** Canton, MA
**Project Manager:** Saskia Oosting

**Page** _1_ of __1__

**Preservative:** none none

**Sample Handling**
Sample Field Filtered: YES   NO   (NA)
Sampled Shipped With Ice: (YES)   NO

### MCP PRESUMPTIVE CERTAINTY REQUIRED  (YES)  NO

| | |
|---|---|
| If Yes, Are MCP Analytical Methods Required? | (YES)  NO |
| If Yes, Are Drinking Water Samples Submitted? | YES  (NO) |
| If Yes, Have You Met Minimum Field QC Requirements? | (YES)  NO |

**Analysis:** PAHs Extract 3540C, PCBs Extract 3545A

| Lab Sample Number | GEI Sample ID | Collection Date | Time | Matrix | No. of Bottles | Sampler(s) Initials | PAHs Extract 3540C | PCBs Extract 3545A | Sample Specific Remarks |
|---|---|---|---|---|---|---|---|---|---|
| -1 | 093820-D1-A-25-A | 5/6/10 | 1633 | SO | 1 | SLS | X | X | HOLD |
| -2 | 093820-D1-A-25-B | | 1636 | | | | X | X | |
| -3 | 093820-D1-A-25-C | | 1642 | | | | X | X | |
| -4 | 093820-D1-A-26-A | | 1618 | | | | X | X | |
| -5 | 093820-D1-A-26-B | | 1622 | | | | X | X | |
| -6 | 093820-D1-A-26-C | | 1628 | | | | X | X | |
| -7 | 093820-D1-A-27-A  D1-A-28-A | | 1558 | | | | X | X | |
| -8 | 093820-D1-A-27-B  D1-A-28-B | | 1605 | | | | X | X | |
| -9 | 093820-D1-A-27-C  D1-A-28-C | | 1612 | | | | X | X | |
| -10 | 093820-D1-A-28-A  D1-A-29-A | | 1541 | | | | X | X | |
| -11 | 093820-D1-A-28-B  D1-A-29-B | | 1549 | | | | X | X | |(1) |
| -12 | 093820-D1-A-28-C  D1-A-29-C | | 1554 | | | | X | X | |

**Turnaround Time (Business days):**
Normal X   Other_____
10 Day____   7 Day____
5 Day____   3 Day____

Before submitting rush turnaround samples, you **must** notify the laboratory to confirm that the TAT can be achieved.

**MCP Level Needed:** GEI requires the most stringent Method 1 MCP standard be met for all analytes whenever possible.

**Additional Requirements/Comments/Remarks:**
see Mark Warren regarding these samples

Please Hold all samples until notified by GEI

| Relinquished by: (signature) | Date | Time | Received by: (signature) |
|---|---|---|---|
| | 5/6/10 | 1920 | GEI Sample Fridge |
| GEI Sample Fridge | 5/7/10 | 1320 | [signature] |
| [signature] | 5/7/10 | 1320 | Will Axell |
| Will Axell | 5/7/10 | 1630 | Will Axell |

2.2-

M91216

**Frank D'Agostino**

| | |
|---|---|
| **From:** | Haley, Heather [HHaley@geiconsultants.com] |
| **Sent:** | Wednesday, May 26, 2010 10:47 AM |
| **To:** | Frank D'Agostino |
| **Cc:** | Siegener, Ray |
| **Subject:** | Canton Airport Samples to Run |

Hey Frank,

We would like to run a few samples on hold for Canton Airport for PCBS using **manual soxhlet** extraction:
Collected on 5/6/10:

093820-DI-A-28A
093820-DI-A-28B
093820-DI-A-28C
093820-DI-A-29A
093820-DI-A-29B
093820-DI-A-29C

Let me know if you have any questions or concerns, or require any additional documentation.

Thanks,
Heather
Heather B. Haley, P.G.
Project Geologist
GEI Consultants, Inc.
400 Unicorn Park Drive
Woburn, MA 01801

phone (781) 721-4063
cell (781) 424-9906
fax (781) 721-4073

5/26/2010

**M91216R: Chain of Custody**

**Page 2 of 2**

| Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup | BWSC-CAM | Exhibit VII A-1 |
|---|---|---|
| | 21 May 2004 | Revision No. 3.2 |
| | **Final** | Page 10 of 32 |

**Title:** **MADEP MCP Response Action Analytical Report Certification Form**

---

| MADEP MCP Analytical Method Report Certification Form | | |
|---|---|---|

| Laboratory Name: | Accutest Laboratories of New England | Project #: | M91216R |
|---|---|---|---|

| Project Location: | Canton Airport Canton MA | MADEP RTN [1] | None |
|---|---|---|---|

This form provides certifications for the following data set:
   M91216-10R,M91216-11R,M91216-12R,M91216-7R,M91216-8R,M91216-9R

Sample Matrices:     Groundwater          Soil/Sediment     X   Drinking Water     ( )          Other:          ( )          ( )

| **MCP SW-846** | 8260B ( ) | 8151A ( ) | 8330 ( ) | 6010B ( ) | 7470A/1A ( ) |
|---|---|---|---|---|---|
| **Methods Used** | 8270C ( ) | 8081A ( ) | VPH ( ) | 6020 ( ) | 9014M [2] ( ) |
| As specified in MADEP | 8082 (X) | 8021B ( ) | EPH ( ) | 7000 S [3] ( ) | 7196A ( ) |

Compendium of
Analytical Methods.
**(Check all that apply)**

1 List Release Tracking Number (RTN), if known
2 M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method
3 S - SW-846 Methods 7000 Series  List Individual method and analyte

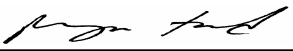*An affirmative response to questions A, B, C, and D is required for "Presumptive Certainty status*

| | | | | |
|---|---|---|---|---|
| **A** | Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the data set? | ☑ | Yes | ☐ No [1] |
| **B** | Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines? | ☑ | Yes | ☐ No [1] |
| **C** | Does the data included in this report meet all the analytical requirements for "Presumptive Certainty", as described in Section 2.0 (a), (b), (c) and (d) of the MADEP document CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? | ☑ | Yes | ☐ No [1] |
| **D** | **VPH and EPH methods only:** Was the VPH or EPH method run without significant modifications, as specified in Section 11.3? | ☑ | Yes | ☐ No [1] |

*A response to questions E and F below is required for "Presumptive Certainty" status*

| | | | | |
|---|---|---|---|---|
| **E** | Were all QC performance standards and recommendations for the specified methods achieved? **Refer to Narrative** | ☐ | Yes | ☑ No [1] |
| **F** | Were results for all analyte-list compounds/elements for the specified method(s) reported? **Refer to Narrative** | ☑ | Yes | ☐ No [1] |

[1] *All Negative responses must be addressed in an attached Environmental Laboratory case narrative.*

*I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.*

| Signature: | *[signature]* | Position: | **Laboratory Director** |
|---|---|---|---|
| Printed Name: | **Reza Tand** | Date: | **06/07/2010** |

# Internal Sample Tracking Chronicle

**GEI Consultants, Inc.**

**Job No:** **M91216R**

**Canton Airport Canton MA**
**Project No:** **00291-7**

| Sample Number | Method | Analyzed | By | Prepped | By | Test Codes |
|---|---|---|---|---|---|---|
| **M91216-7R Collected: 06-MAY-10 15:58 By: SLS** | | | | **Received: 07-MAY-10 By: JB** | | |
| **093820-DI-A-28-A** | | | | | | |
| M91216-7R | SM21 2540 B MOD. | 02-JUN-10 | MS | | | %SOL |
| M91216-7R | SW846 8082 | 07-JUN-10 00:45 | CZ | 05-JUN-10 | RJ | P8082SOXHLET |
| **M91216-8R Collected: 06-MAY-10 16:05 By: SLS** | | | | **Received: 07-MAY-10 By: JB** | | |
| **093820-DI-A-28-B** | | | | | | |
| M91216-8R | SM21 2540 B MOD. | 02-JUN-10 | MS | | | %SOL |
| M91216-8R | SW846 8082 | 07-JUN-10 09:09 | CZ | 05-JUN-10 | RJ | P8082SOXHLET |
| **M91216-9R Collected: 06-MAY-10 16:12 By: SLS** | | | | **Received: 07-MAY-10 By: JB** | | |
| **093820-DI-A-28-C** | | | | | | |
| M91216-9R | SM21 2540 B MOD. | 02-JUN-10 | MS | | | %SOL |
| M91216-9R | SW846 8082 | 07-JUN-10 09:28 | CZ | 05-JUN-10 | RJ | P8082SOXHLET |
| **M91216-10R Collected: 06-MAY-10 15:41 By: SLS** | | | | **Received: 07-MAY-10 By: JB** | | |
| **093820-DI-A-29-A** | | | | | | |
| M91216-10R | SM21 2540 B MOD. | 02-JUN-10 | MS | | | %SOL |
| M91216-10R | SW846 8082 | 07-JUN-10 09:47 | CZ | 05-JUN-10 | RJ | P8082SOXHLET |
| **M91216-11R Collected: 06-MAY-10 15:49 By: SLS** | | | | **Received: 07-MAY-10 By: JB** | | |
| **093820-DI-A-29-B** | | | | | | |
| M91216-11R | SM21 2540 B MOD. | 02-JUN-10 | MS | | | %SOL |
| M91216-11R | SW846 8082 | 07-JUN-10 10:06 | CZ | 05-JUN-10 | RJ | P8082SOXHLET |
| **M91216-12R Collected: 06-MAY-10 15:54 By: SLS** | | | | **Received: 07-MAY-10 By: JB** | | |
| **093820-DI-A-29-C** | | | | | | |
| M91216-12R | SM21 2540 B MOD. | 02-JUN-10 | MS | | | %SOL |
| M91216-12R | SW846 8082 | 07-JUN-10 10:25 | CZ | 05-JUN-10 | RJ | P8082SOXHLET |

New England
**ACCUTEST**
LABORATORIES

**5**

## GC Semi-volatiles

## QC Data Summaries

### Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

# Method Blank Summary

**Job Number:** M91216R
**Account:** GEI GEI Consultants, Inc.
**Project:** Canton Airport Canton MA

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|---------|-----|----------|-----|-----------|------------|------------------|
| OP21542-MB | BB30279.D | 1 | 06/06/10 | CZ | 06/05/10 | OP21542 | GBB2049 |

**5.1.1**

**5**

**The QC reported here applies to the following samples:**          **Method:** SW846 8082

M91216-7R, M91216-8R, M91216-9R, M91216-10R, M91216-11R, M91216-12R

| CAS No. | Compound | Result | RL | Units | Q |
|---------|----------|--------|-----|-------|---|
| 12674-11-2 | Aroclor 1016 | ND | 98 | ug/kg | |
| 11104-28-2 | Aroclor 1221 | ND | 98 | ug/kg | |
| 11141-16-5 | Aroclor 1232 | ND | 98 | ug/kg | |
| 53469-21-9 | Aroclor 1242 | ND | 98 | ug/kg | |
| 12672-29-6 | Aroclor 1248 | ND | 98 | ug/kg | |
| 11097-69-1 | Aroclor 1254 | ND | 98 | ug/kg | |
| 11096-82-5 | Aroclor 1260 | ND | 98 | ug/kg | |

| CAS No. | Surrogate Recoveries | | Limits |
|---------|----------------------|-----|--------|
| 877-09-8 | Tetrachloro-m-xylene | 89% | 30-150% |
| 877-09-8 | Tetrachloro-m-xylene | 78% | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 102% | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 96% | 30-150% |

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** M91216R
**Account:** GEI GEI Consultants, Inc.
**Project:** Canton Airport Canton MA

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|---------|----|----------|-----|-----------|------------|------------------|
| OP21542-BS | BB30280.D | 1 | 06/07/10 | CZ | 06/05/10 | OP21542 | GBB2049 |
| OP21542-BSD | BB30281.D | 1 | 06/07/10 | CZ | 06/05/10 | OP21542 | GBB2049 |

**5.2.1**

**5**

**The QC reported here applies to the following samples:**          **Method:  SW846 8082**

**M91216-7R, M91216-8R, M91216-9R, M91216-10R, M91216-11R, M91216-12R**

| CAS No. | Compound | Spike ug/kg | BSP ug/kg | BSP % | BSD ug/kg | BSD % | RPD | Limits Rec/RPD |
|---------|----------|-------------|-----------|-------|-----------|-------|-----|----------------|
| 12674-11-2 | Aroclor 1016 | 261 | 248 | 95 | 252 | 97 | 2 | 40-140/30 |
| 11104-28-2 | Aroclor 1221 | | ND | | ND | | nc | 40-140/30 |
| 11141-16-5 | Aroclor 1232 | | ND | | ND | | nc | 40-140/30 |
| 53469-21-9 | Aroclor 1242 | | ND | | ND | | nc | 40-140/30 |
| 12672-29-6 | Aroclor 1248 | | ND | | ND | | nc | 40-140/30 |
| 11097-69-1 | Aroclor 1254 | | ND | | ND | | nc | 40-140/30 |
| 11096-82-5 | Aroclor 1260 | 261 | 267 | 102 | 264 | 101 | 1 | 40-140/30 |

| CAS No. | Surrogate Recoveries | BSP | BSD | Limits |
|---------|---------------------|-----|-----|--------|
| 877-09-8 | Tetrachloro-m-xylene | 98% | 94% | 30-150% |
| 877-09-8 | Tetrachloro-m-xylene | 39% | 96% | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 113% | 108% | 30-150% |
| 2051-24-3 | Decachlorobiphenyl | 105% | 99% | 30-150% |

# Semivolatile Surrogate Recovery Summary

**Job Number:** M91216R
**Account:** GEI GEI Consultants, Inc.
**Project:** Canton Airport Canton MA

**Method: SW846 8082**                    **Matrix:** SO

Samples and QC shown here apply to the above method

| Lab Sample ID | Lab File ID | S1 [a] | S1 [b] | S2 [a] | S2 [b] |
|---|---|---|---|---|---|
| M91216-7R | BB30282.D | 72.0 | 74.0 | 84.0 | 69.0 |
| M91216-8R | BB30283.D | 12265.0* [c] | 7801.0* [c] | 88.0 | 40.0 |
| M91216-9R | BB30284.D | 62.0 | 51.0 | 89.0 | 70.0 |
| M91216-10R | BB30285.D | 77.0 | 56.0 | 118.0 | 96.0 |
| M91216-11R | BB30286.D | 85.0 | 58.0 | 112.0 | 98.0 |
| M91216-12R | BB30287.D | 67.0 | 47.0 | 95.0 | 78.0 |
| OP21542-BS | BB30280.D | 98.0 | 39.0 | 113.0 | 105.0 |
| OP21542-BSD | BB30281.D | 94.0 | 96.0 | 108.0 | 99.0 |
| OP21542-MB | BB30279.D | 89.0 | 78.0 | 102.0 | 96.0 |

| Surrogate Compounds | Recovery Limits |
|---|---|
| S1 = Tetrachloro-m-xylene | 30-150% |
| S2 = Decachlorobiphenyl | 30-150% |

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside control limits due to possible matrix interference.

5.3.1
5